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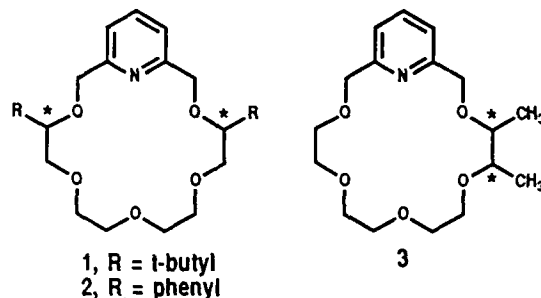
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<p>Three new chiral pyridino-18-crown-6 ligands containing either two t-butyl, two phenyl or two methyl substituents have been prepared (1-3, Figure 1). These ligands were prepared by reacting the appropriate chiral tetraethylene glycol with 2,6-pyridinedimethyl ditosylate (Scheme I) to give 1, an oil, <math>[\alpha]_D^{25} -15.09^\circ</math> (c = 0.424, benzene); 2, mp 66-67 °C, <math>[\alpha]_D^{25} -128.9^\circ</math> (c = 0.34, benzene); 3, an oil, <math>[\alpha]_D^{25} -22.45^\circ</math> (c = 1.648, benzene). The starting chiral tetraethylene glycols (4-6) were prepared as shown in Scheme II. t-Butylethylene glycol needed to prepare the chiral di-t-butyltetraethylene glycol (4) was resolved through its hydrogen phthalate ester and using brucine as the resolving agent.</p>					
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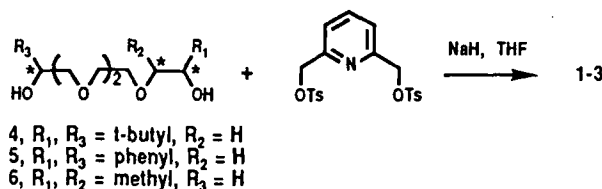
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Figure 1. Chiral di-t-butyl, diphenyl, and dimethylpyridino-18-crown-6



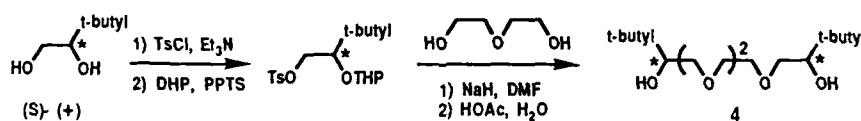
Scheme I. Preparation of chiral pyridino-crowns



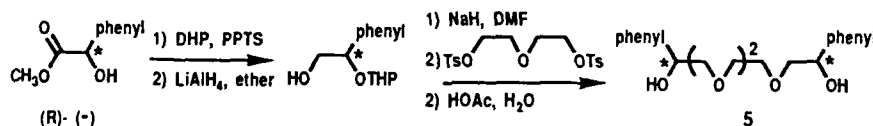
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Scheme II. Preparation of chiral tetraethylene glycol starting materials

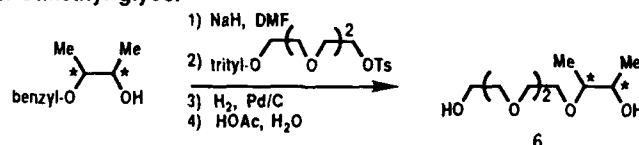
A. Di-t-butyl glycol



B. Diphenyl glycol



C. Dimethyl glycol



Complexation of the (R)- and (S)- forms of  $\alpha$ -(1-naphthyl)ethylammonium perchlorate by chiral ligands 2 and 3 have been studied by <sup>1</sup>H NMR methods in CD<sub>3</sub>OD. Ligand (R,R)-2 exhibited modest chiral recognition for the (S)- form of the salt over the (R)- form. However, ligand (R,R)-3 exhibited little or no chiral recognition for the enantiomers of the ammonium salt.